CLAIMS

What is claimed is:

1.   A method for providing derivative content from provided primary content, the method comprising:

parsing guidance in accordance with a markup language having elements; parsing being performed to provide a tree representation; the guidance comprising a first element comprising a call, a first declaration of a first subroutine, and a second declaration of a second subroutine nested within the first declaration; and

providing derivative content in accordance with the primary content as directed by traversing the tree representation; wherein traversing comprises performing in a first execution context until encountering the call, performing the second subroutine in an execution context identified in the declaration of the second subroutine, and returning to performance in the first execution context after the call; and wherein the call comprises a first user-defined element identifying the first subroutine, and a second user-defined element identifying the second subroutine, the second element being nested within the first element.

2.   The method of claim 1 wherein at least one of the first user-defined element and the second user-defined element comprises a tag.

3.   The method of claim 1 wherein at least one of the first subroutine and the second subroutine includes an operation using a parameter passed by value.

4.   The method of claim 1 wherein at least one of the first subroutine and the second subroutine includes an operation using a parameter passed by reference.

5.   The method of claim 1 wherein at least one of the first subroutine and the second subroutine includes an operation using a parameter value, wherein the value is at least one of a string and a tree.

6.   The method of claim 1 wherein at least one of the first subroutine and the second subroutine returns at least one of a string and a tree.

7.   The method of claim 1 wherein at least one of the first subroutine and the second subroutine includes at least one of an operation using a first tree or a return value being a second tree, wherein at least one of the first tree and the second tree comprises a document object model.

8.   A data storage device comprising indicia of the method of claim 1.

9.   A communication system comprising the data storage device of claim 8.

10.   A transcoder comprising:

a process for providing derivative content in accordance with primary content and guidance; and

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a language processor that parses the guidance in accordance with a markup language to direct the process for providing derivative guidance in accordance with a nested subroutine declaration of the language.

11. The transcoder of claim 10 wherein the language processor comprises an interpreter.

5 12. A data storage device comprising indicia of the method of claim 10.

13. A communication system comprising the data storage device of claim 11.

14. A transcoder comprising:

a process for providing derivative content in accordance with primary content and guidance; and

10 a language processor that parses the guidance in accordance with a markup language to direct the process for providing derivative guidance in accordance with a nested subroutine call of the language.

15. The transcoder of claim 14 wherein the language processor comprises an interpreter.

16. A data storage device comprising indicia of the method of claim 14.

15 17. A communication system comprising the data storage device of claim 16.

18. A method for providing derivative content from provided primary content, the method comprising:

parsing guidance to provide a first tree representation; the guidance comprising at least a first reference identifying referenced content; and

20 providing the derivative content as directed by traversing the first tree representation; wherein traversing comprises: providing a second tree representation of at least a portion of the primary content, parsing the referenced content to provide a subtree representation of at least a portion of the referenced content inserted at a node of the second tree, and providing derivative content in accordance with the second tree.

25 19. A data storage device comprising indicia of the method of claim18.

20. A communication system comprising the data storage device of claim 19.

21. A transcoder comprising:

a process for providing derivative content in accordance with primary content and guidance; and

30 a language processor that parses the guidance in accordance with a markup language to direct the process for providing derivative guidance in accordance with a reference of the language referring to other content.

22. The transcoder of claim 21 wherein the other content comprises further guidance.

23. The transcoder of claim 21 wherein the other content comprises further primary content.

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24.   A communication system comprising:

means for transcoding primary content to provide derivative content in accordance with guidance, the guidance comprising a nested subroutine; and

means for communicating the derivative content to a plurality of provided access devices.

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